Nature Connections

News and Events from the Missouri Department of Conservation • July/August 2014



Looking Back For The Future

It's a great time to be a student in Missouri schools

on a fishing trip.

hen I was a boy growing up in the Allegheny Mountains of northwest Pennsylvania, a group of us would head for the hills with hatchet in hand. We would spy out the steepest part of a hill that was companion to a 2- to 3-inch grapevine and cut it, swinging to our day's delight. In looking back on this memory, I am amazed by how little I knew about the woods where I was sacrificing that grapevine. My friends and I were experts at picking out something that would lift us 10 feet off the ground, but had no idea what kind of tree held that vine nor the type of forest in which we spent endless hours.

Move ahead four decades or so and replace Pennsylvania with Missouri where many students today have a better understanding of their forest ecosystem. Right now, every Missouri student in Grades K-12 has an opportunity to learn about Missouri's fish, forests, and wildlife resources through the Department of Conservation's Discover Nature Schools (DNS) curriculum. Participating schools in the DNS unit Nature Unleashed (Grades 3-5), learn not only about our forest ecosystems, but also prairies and ponds. Younger children get a good jump on nature by using the DNS unit Nature Unfolds (Grades K-2) where emerging learners can experience the outdoors in a number of approaches such as investigating the wind, snow, and how plants and animals change with the seasons.

Back in my childhood days, I recall sitting on the banks of the Little Brokenstraw Creek fishing for trout. At the time, I had no idea the stream I was fishing had no riparian corridor and the bank was actively eroding. I certainly would have known this and much more about stream ecosystems had I been engaged in the DNS middle school curriculum **Conserving Missouri's Aquatic Ecosystems** (Grades 5–8). This aquatic-based unit explores watersheds, fish biology, and angling. Grant money is even available to help schools



My fairly tedious high school biology lectures would have been greatly enhanced with the DNS unit **Nature Unbound**. This very detailed Missouri-based DNS curriculum has become a big favorite among many high school teachers and students alike.

In junior high, I recall taking shop. With a trusty pony-shaped lamp that I constructed, I was certain a career in carpentry was not in my future. However, today in Missouri more and more schools are offering **Hunter Education** as a junior high elective. Imagine learning how muzzleloaders work, discovering the diverse types of firearms available, and finding out how various shotgun chokes influence what kind of game you can harvest. A hands-on skills portion is included to help teach students how to safely and properly handle firearms while also providing them with their Missouri Hunter Education Certification so they can go afield in search of their favorite game animal.

I also remember getting a youth recurve bow for Christmas one year. With the right teaching, proper stance, and correct anchor point, I might have had better success shooting. With today's Missouri Department of Conservation's **National Archery in the Schools** program, students receive excellent instruction, as well as have fellow archers to share the experience. There's also a competition aspect to possibly take it to the next level. Schools such as Sarcoxie, Willard, Joplin, and Crane have some of the best archery shooting teams in the state.

This is a great time to be a student in Missouri schools and the Missouri Department of Conservation (MDC) offers something for all grade levels. This hands-on, practical teaching adds depth to the learning process and amply prepares the next generation for the challenges they will face. If your school is not taking advantage of the FREE teacher training and teacher/student publication materials MDC offers, please contact your school administrators and teachers to see how they can work with us to help your students **Discover Nature**. And remember classroom education materials grants and transportation grants are available. Don't miss out. Go to <mdc.mo.gov/node/9019> to learn more today.

- Jay Barber, Conservation Education Consultant

Joplin Office in the Wildcat Glades Conservation & Audubon Center

201 W. Riviera Drive, Suite B, Joplin, MO 64804 • mdc.mo.gov/node/292



The Joplin Conservation Office, located in the Wildcat Glades Conservation & Audubon Center, is your local connection to Missouri's fish, forests, and wildlife. Stop by and purchase hunting and fishing permits, attend a nature program, go for a hike, enjoy a picnic, or access Shoal Creek. Within the 190 acres of Wildcat Park, you will find a diverse mix of wildlife habitats rich with flora and fauna. From I-44, take exit 6, and turn south on MO-86. Turn right on Riviera Drive to enter Wildcat Park.

HOURS:

Monday–Friday: 8 AM–5 PM Closed all state holidays. Audubon Center hours vary.

TO REGISTER FOR A PROGRAM:

Programs are free. Call 417-629-3423 to sign up for a program requiring registration. If you are unable to attend a program, please call and cancel as a courtesy to those on the waiting list.

July Events .

Shoal Creek Cleanup

July 26 • Saturday • 8 AM-1 PM Shoal Creek (Joplin) to Schermerhorn Park (Galena, KS) Registration required (ages 10 and up; ages 10–17 must be accompanied by an adult)

Help us with a canoeing cleanup along Shoal Creek. Join various Missouri/Kansas conservation partners—including Southwest Ozark Stream Teams, Department of Conservation, and Audubon Missouri—for this event. A limited number of canoes will be available to adults and teens with canoeing experience. Program specifics and shuttle information will be provided upon registering.

July Events _____

You Can Canoe

July 28 • Monday • 6–7:30 PM
Kellogg Lake (Carthage)
Registration required (ages 8 and up;
ages 8–15 must be accompanied by an adult)
Learn the basics of canoeing—from planning and
safety tips to paddling techniques. Gain experience
and confidence so you can discover the beautiful
creeks and rivers in southwest Missouri. Dress for a
water activity (creek shoes and clothes) and bring
sunscreen. Canoes, paddles, and life vests will be
provided.

August Events

Shooting Basics-.22 Rifle

August 4 • Monday • 6:30–8 PM
Crowder Conservation Area Range (Neosho)
Registration required (families, ages 8 and up)
Join us to discover the joys of shooting a .22 rifle.
We will discuss rifle nomenclature, dominant eye, sight picture, sight alignment, breath control, trigger squeeze, and shooting positions plus much more. You may use our rifles or plan to use your own. Please make sure your rifle is completely unloaded before arriving.

Shoal Creek Water Festival

August 9 • Saturday • 10 AM —3 PM Wildcat Glades Conservation & Audubon Center (Joplin)

No registration required (all ages)
Cool off at the Shoal Creek Water Festival. Join us for this partnership event at the creek in Wildcat Park for a day of water fun. Take a dip in Shoal Creek in your cardboard boat, cheer your duck on to victory during the duck race, splash in Silver Creek during the Creek Hike, and learn about water quality, conservation, and ecology at one of our water activity booths. Youngsters, don't forget to enter the Kids' Shoebox Boat Race.

This day of water fun is FREE to the public and all ages are welcome.



Be A Patient Villager

Respect Your Wild Neighbors

It may take a village to raise a child, but it takes patience to let teenagers grow, learn,

and excel to their place in the community. A parent often must use patience to avoid "doing everything" for the teen. The very same "patience" is often practiced by local wildlife parents.



As animal offspring are nurtured, many wildlife parents gradually give their young ones a little more freedom to move around and explore. It is extremely rare for any wildlife that was cared for to suddenly be abandoned. On those rare occasions, it is unquestionably when the individual is unfit to survive. Keeping it with its siblings might endanger the others by spread of disease or taking valuable resources and stressing the rest of the brood/litter. Outright neglect is rare. So the majority of wildlife "teenagers" seen during summer months are not deserted, hurt, or sick. They are stretching their wings or legs and exploring, all the time under mom or dad's watchful eye, ear, or nose. It is important they keep a distance from people, or better yet, for "villagers" to respect their space. The wildlife teens must gain life skills on their own and have a natural caution of humans. They should not be fed or helped in any way; this can interfere with their learning of skills needed to survive and to be a good neighbor by usually going undetected in our community.

A functioning village is made up of all kinds of members—people and animals—that practice patience and appreciation to make the village work the best for our gardens, backyards, and whole community. Patience and appreciation of nature are also two qualities that help make a villager a budding naturalist.

- Jeff Cantrell, Conservation Education Consultant

Andy Dalton Shooting Range and Outdoor Education Center

4897 N. Farm Road 61, Ash Grove, MO 🛦 65604 • mdc.mo.gov/node/288

DISCOVER

August Events ₋

Effective Wing Shooting For The Hunter

August 23 • Saturday • 8:30 AM-4:30 PM Registration required (all ages) Join us for this premier wing shooting program and learn about wounding rates in waterfowl, performance differences of steel and lead shotshells, and how to improve your wing shooting and distance estimation skills.

Dove Hunting Clinic

August 30 • Saturday • 8:30 AM-2 PM Registration required (all ages) Join us to learn the most effective methods for dove hunting. We will discuss the biology of the bird and then teach you how to wing shoot using the Effective Wing Shooting for the Hunter techniques. We will discuss using decoys and how to use concealment to your benefit.

To get to the Andy Dalton Shooting Range and Outdoor Education Center, take US Highway 160 west of Willard, turn south on Farm Road 61, and go 2.5 miles, facility on the west side of road. Facilities include an outdoor education center and archery, rifle, pistol, and shotgun ranges, including skeet and trap.

Discovering Nature at



Target shooting at Dalton Range

Missouri's Conservation **Shooting Ranges**

Did you know that the Missouri Department of Conservation manages 5 staffed shooting ranges along with 60 unstaffed ranges across the state? In southwest Missouri, the Andy Dalton Shooting Range and Outdoor Education Center plus another 5 unstaffed rifle, handgun, and shotgun ranges are open for public use. The unstaffed ranges are located at Busiek State Forest and Wildlife

Area, Pleasant Hope Conservation Area, Lead Mine Conservation Area, Fort Crowder Conservation Area, and Flag Spring Conservation Area. There are rules and regulations that pertain to using these various facilities and at the staffed ranges there is a nominal fee charged. There is no fee at the unstaffed ranges which are open Tuesday through Sunday from sunrise to sunset and closed every Monday for maintenance.

At the Dalton Range, we use a controlled cease fire process to maintain the highest level of safety for every user. To view the range safety video, go to <mdc.mo.gov/node/25379>. At the unstaffed ranges, you have no one to monitor the user's safety. Remember, you are only as safe as each person handling their firearms and this is why range etiquette becomes paramount at the unstaffed ranges. At the unstaffed ranges there are earth side berms that separate the shooting lanes and an earthen backstop that the projectiles should impact. There are paper targets provided and you should only place targets on the provided target holders to avoid the danger of ricochet. If a person shoots at a makeshift target (which is against Wildlife Code of Missouri on the unstaffed ranges), it may cause the projectile to bounce over the earthen backstop and physically leave the range. This could place the shooter in a liable situation if damage or injury occurs.

Obviously, when people need to go forward of the firing line to replace targets, all shooting should stop and only commence when everyone has returned from downrange. Again, being polite, courteous, and cooperative tends to show goodwill toward the other users of the unstaffed range. Range safety should be at the forefront of everyone's mind when shooting.

For more information about the staffed shooting ranges go to <mdc.mo.gov/node/6209> and for

Holiday Closing July 4 • Independence Day information about the unstaffed shooting ranges go to <mdc.mo.gov/node/4460>.

—Mike Brooks, Outdoor Education Center Supervisor

HOURS:

September 14-April 14

Monday and Thursday: 9 AM-4:30 PM Friday-Sunday: 12 NOON-4:30 PM

April 15-September 13

Monday: 9 AM-4:30 PM Thursday: 9 AM-7:30 PM

Friday-Sunday: 12 NOON-4:30 PM

Closed Tuesdays, Wednesdays and all state holidays. Hours are subject to change.

FACILITIES AND FEES:

Available for individual and group use. Call for information and possible restrictions.

- Rifle/pistol range fee: \$3 per booth per hour
- Trap/skeet range fee: \$3 per person per round of 25 clay targets
- Shotgun patterning range: \$3 per person per hour
- Archery range: \$3 per person per hour
- Group use fee: \$20 per hour plus \$3 per round of 25 clay targets

TO REGISTER FOR A PROGRAM:

Programs are free. Call 417-742-4361 or email <DaltonRange@mdc.mo.gov> to sign up for a program requiring registration. If you are unable to attend a program, please call and cancel as a courtesy to those on the waiting list.

Springfield Conservation Nature Center

4601 S. Nature Center Way, Springfield, MO 65804 • mdc.mo.gov/node/287





The Springfield Conservation Nature Center is located in southeast Springfield just west of US-65 off the James River Freeway (US-60). Indoors, enjoy nature exhibits, attend programs, purchase hunting and fishing permits, browse through a nature-related gift shop, and pick up free conservation brochures. Outdoors, enjoy three miles of hiking trails through a variety of natural communities. Call to schedule a naturalist-led program for your organized group.

CURRENT HOURS:

March 1-October 31

Building: Tuesday-Saturday: 8 AM-5 PM

Sunday: 12 NOON-5 PM Closed Monday

Trails: Sunday-Saturday: 8 AM-8 PM

TO REGISTER FOR A PROGRAM:

Programs are free. Call 417-888-4237 to sign up for a program requiring registration. If you are unable to attend a program, please call and cancel as a courtesy to others.

July Events_

Primitive Skills Series Making Cordage

July 6 • Sunday • 1–3 PM

No registration required (all ages)

Volunteer Naturalist and primitive skills specialist Don Brink demonstrates how to weave plant fibers into cordage. Try your hand at this age-old skill and learn about the plants primitive man used to make cordage. Stop by anytime.

Beginning Fishing For Women

July 8 • Tuesday • 6:30-8 PM

Registration begins July 1 (women and girls ages 14–17 accompanied by an adult female)

Have you been wanting to enjoy one of the Ozarks favorite outdoor activities and don't know where to start? Join us for an evening of classroom instruction on basic fishing. On Friday, July 11, from 6:30-8pm, we will head to the ol' fishing hole and catch a few. In order to go fishing, you must attend this classroom component.

July Events ____

For Adults Only-James River Float

July 9 • Wednesday • 8:30 AM-2:30 PM Registration begins July 1 (ages 18-adult) If you're a first-time or novice canoeist, this is a great chance to "get your feet wet." Pack a sack lunch, bring plenty of water, and wear clothes you can get wet. We will rent canoes from an outfitter in Galena. Cost for canoe rental is \$15 per person. Meet at the nature center and

Conservation TEEN Club-Float Trip

July 15 • Tuesday • 9 AM-4 PM Registration begins July 1 (ages 12–17) Come along as we float and explore one of the many streams in the Ozarks. Drinks, lunch, and transportation will be provided.

Nature Art With A Chinese Brushstroke

July 16 • Wednesday • 1-2:30 PM or 2:45-4:15 PM Registration begins July 1 (ages 8-adult) Art instructor and nature enthusiast Hing Wah Hatch will increase your powers of observation as she demonstrates, step-by-step, how to capture the essence of local plants and animals through Chinese-style painting. Participants will go home with more nature knowledge and their own artistic masterpiece.

Hiking Club

July 18 • Friday • 8-11:30 AM

Registration begins July 1 (ages 18-adult) Hike at Busiek State Forest and Wildlife Area with Volunteer Naturalist Pat Stritzel. Meet at the nature center and carpool. Bring water and snacks and wear comfortable hiking shoes. Hike is three miles and rated moderate in difficulty.

Show-Me Herps

July 19 • Saturday • 2–3 PM

No registration required (all ages)

Amphibians and reptiles are often confused with each other. Learn how frogs, toads, and salamanders differ from lizards, turtles, and snakes from Conservation Department employee and author of the Show-Me Herps book John Miller. Books will be available for purchase and signing by the author following the program. From 3-4pm, view live amphibians and reptiles, including venomous snakes, courtesy of Finley Valley Serpentarium.

Amphibians And Reptiles On Display

July 19 • Saturday • 3-4 PM

No registration required (all ages)

Come see live specimens of Missouri's amphibians and reptiles on display, including venomous snakes, courtesy of Finley Valley Serpentarium.

Outdoor Hazards

July 23 • Wednesday • 2–3 PM *No registration required (ages 5-adult)* What just bit me? And why am I so itchy? Have you ever seen a snake slither across your path and wondered if it was venomous? If you answered yes to any of these questions, join us for an afternoon discussion about plants, animals, and insects that can ruin a summer afternoon.

Beginner Orienteering For Families

July 24 • Thursday • 9–11:30 AM

Registration begins July 1 (ages 8 and up with an adult mentor)

Parents, grandparents, and adult mentors, bring your youngster(s) and learn the basics of using a compass and topographic maps during the indoor portion of this program and then test your newfound skills with an outdoor exercise at Living Memorial Park.

Family Fishing Fun

July 24 • Thursday • 6:30-9 PM Registration begins July 1 (ages 8 and up with an adult mentor)

Parents, grandparents, and adult mentors, bring your youngster(s) and meet at the Bois D'Arc Conservation Area fishing pond for an evening of fishing. You may bring your own fishing equipment or use ours; we'll supply the bait. A fishing permit is required for Missouri residents ages 16 to 64 and nonresidents ages 16 and up.

Dragons Of The Insect World

July 29 • Tuesday • 11 AM-12 NOON Registration begins July 1 (ages 6-adult) Dragonflies may look beautiful and delicate to you, but to many insects they are fierce and hungry predators to be avoided. Join Volunteer Naturalist Mike Mihalik to learn about the lifestyles of these mysterious dragons of the insect world.

Conservation Kids' Club **Itty-Bitty Indicators**

July 31 • Thursday • 7–8:15 PM Registration begins July 1 (ages 7–12) "Itty-bitty" indicators are aquatic animals that help determine the water quality in streams and lakes. Learn how to identify some of these small but important insects and other creatures and discover how they survive in water. Please, no younger siblings and only one adult per group of kids. Note time change this month.

July **Little Acorns** programs are listed on page 5.



Ms. Ladybug is on vacation this month

Springfield Conservation Nature Center

4601 S. Nature Center Way, Springfield, MO 65804 • mdc.mo.gov/node/287

Temporary Exhibits



July • Missouri Junior **Duck Stamp Contest**



August • Insect and Natural History Photography By Photographer and Entomologist Dr. Tom Riley

Little Acorns Please limit to one per month.

Programs are 45 minutes in length.

July Events

Bee Bustle

July 3 • Thursday • 11 AM or 1:30 PM *Registration begins June 17 (ages 3–6)* What are those bees up to as they bustle about all day? Buzz on in and learn about the "buzzy" daily lives of bees inside and outside the hive.

Roadrunners . . . Beep, Beep!

July 10 • Thursday • 11 AM or 1:30 PM July 26 • Saturday • 11 AM Registration begins July 1 (ages 3–6) Greater roadrunners are more than just a cartoon, so run in and learn about this really cool bird. Beep, beep!

Ant Antics

July 18 • Friday • 11 AM or 1:30 PM July 19 • Saturday • 11 AM Registration begins July 1 (ages 3–6) Have fun as we explore the antics of these tiny insects and then create an "antsy" craft to take home.

August Events

Registration begins August 1 (ages 3–6)

Calling All Cicadas

August 8 • Friday • 11 AM or 1:30 PM The droning sound of male cicadas provide background music to summers in the Ozarks. Spend some time learning about these fascinating and loud insects before they quietly disappear.

Butterfly Magic

August 12 • Tuesday • 11 AM or 1:30 PM August 16 • Saturday • 11 AM Butterflies grow up in a magical way. Join us and travel through the butterfly's life cycle-from its humble beginnings to its glorious finish!

Cool Cave Creatures

August 29 • Friday • 11 AM or 1:30 PM Don't be in the dark about cool cave creatures and features. Join the fun as we go "underground" to see what life in a cave is all about.

August Events

Hummingbird Feeders

August 6 • Wednesday • 1–3 PM No registration required (ages 5 and up with adult assistance)

Stop by to learn how to make a hummingbird feeder. You supply the empty baby food jar and lid and we'll provide the rest. By hanging your feeder, you'll attract hummingbirds and their newly hatched young to your backyard. Please, no organized groups.

Family Creek Exploration

August 8 • Friday • 10 AM-12 NOON Registration begins July 15 (ages 7 and up with an adult mentor)

Parents, grandparents, and adult mentors, bring your youngster(s) and take a naturalist-guided, aquatic journey into Galloway Creek to see what lives beneath the surface. We will look for fish, crawdads, snails, and insect nymphs. Learn how the invertebrates we find help determine whether the stream is clean or polluted. Dress to get wet and meet at the nature center where we will walk to the creek.

Story Time With Ms. Ladybug

August 13 • Wednesday • 11–11:30 AM *No registration required (ages 2–6)* Join Volunteer Naturalist Joyce Tolliver as she reads a nature story and shares activities with your 2-6 year olds. Please, no organized groups.

Conservation TEEN Club Insect Collecting

August 14 • Thursday • 6-9 PM Registration begins August 1 (ages 12–17) Bugs, bugs, bugs! Come join the fun as we go insect hunting. Insects will be collected and identified. Meet at the nature center where dinner and drinks will be provided.

Insect-O-Rama

Bryan University.

August 15 • Friday • 6:30-9:30 PM No registration required (all ages) Our annual celebration of insects and the important role they play in nature returns! Insects—they fascinate us, they bug us, they surround us, and they bite us, but what would a summer evening be like without them? Join insect specialists and enthusiasts for an evening devoted to discovering insects. Grab your entire family and participate in some creepy-crawly fun for all ages. No registration required. A free shuttle will be available for overflow parking at nearby

Cecropia moth, photo by Tom Riley

Conservation TEEN Club-Snorkeling

August 19 • Tuesday • 9 AM-5 PM Registration begins August 1 (ages 12–17) Come beat the heat and experience a fish-eye view of an Ozarks creek. No prior snorkeling experience is necessary. Transportation and lunch will be provided. You may bring vour own mask and snorkel or use ours.

Hikina Club

August 23 • Saturday • 8 AM-2 PM Registration begins August 1 (ages 18–adult) Cool off this summer by wading through Bull Creek with Volunteer Naturalist Mike Mihalik. Meet at the nature center and carpool. Bring a sack lunch and water and wear clothes you can get wet and sturdy shoes (water shoes recommended for the creek). Ninety percent of the time will be in water. Hike is approximately two miles and rated moderate in difficulty.

The Art Of Woodcarving

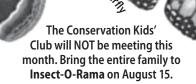
August 23 • Saturday • 10–11 AM Registration begins August 1 (ages 12–adult) Try your hand at woodcarving with members of the Southern Missouri Woodcarving Artists as they teach carving techniques and show how to transform wood into works of art.

Woodcarving Demonstration

August 23 • Saturday • 10 AM-4 PM No registration required (all ages) Visit with members of the Southern Missouri Woodcarving Artists as they share information with the "wood-be" carver, demonstrate carving techniques, show works in progress, and sell some of their art pieces. Stop by anytime.

Monarchs Rule!

August 30 • Saturday • 1-4 PM Registration begins August 1 (ages 5-adult) Every fall millions of monarch butterflies wing over the Ozarks to their winter home in Mexico. Join Volunteer Naturalists Bob and Ruby Ball and Dana Tideman for an indoor/outdoor adventure to explore the fascinating behavior and life cycle of these beautiful travelers.



Shepherd of the Hills Fish Hatchery and Conservation Center

483 Hatchery Road, Branson, MO 65616 • mdc.mo.gov/node/290



The Fish Hatchery and Conservation
Center is located on 221 acres in Branson
off Highway 165 next to Table Rock
Dam. Outdoors, visitors will experience
an active fish hatchery with 700,000
rainbow and brown trout in 30 pools with
opportunities to feed the fish. Indoors,
enjoy a 3,500 gallon aquarium and handson nature exhibits and purchase hunting
and fishing permits. The area also features
four hiking trails, a picnic area, a boat
ramp, and access to Lake Taneycomo.

FACILITY HOURS:

Memorial Day-Labor Day Sunday-Saturday: 9 AM-6 PM Remainder of Year Sunday-Saturday: 9 AM-5 PM

AREA AND TRAIL HOURS:

4 AM-10 PM

The area is open to fishing 24 hours daily, but special permits and regulations do apply. Check the current fishing regulations or call for details.

TO REGISTER FOR A PROGRAM:

Programs are free. Call 417-334-4865, Ext. 0, to sign up for a program requiring registration. If you are unable to attend a program, please call and cancel as a courtesy to those on the waiting list.

FISHING LAKE TANEYCOMO:

Before fishing on Lake
Taneycomo, become familiar
with the regulations and
restrictions. Come by for a free
brochure of the entire lake including fishing accesses. For specific
details about trout fishing here
and across the state, visit
<mdc.mo.gov/node/5603>.

July and August Events

Hiking And Outdoor Survival Tips

July 19 • Saturday • 9–11 AM Registration required (ages 8-adult)
This is a low-impact hike to help you prepare for more rugged hikes in our area. In addition to information on hiking preparations, we will share tips on staying safe, outdoor hazards, basic orienteering, and what to do if you get lost. Hike will be 1-mile long and requires medium effort. No previous outdoor skill experience is required. Bring a water bottle and dress for the weather.

What's Bugging You?

August 7 • Thursday • 7–9 PM Registration required (all ages)
For the most part, it is easy to enjoy the outdoors without being "bugged' by some of our tiny pesky critters. Come learn about the four most irritating critters that make it a challenge to enjoy being outside. We will not only find out what ticks, chiggers, fleas, and mosquitoes look like, but we will give you ways to avoid them. This program will involve a very short outdoor walk.

Frogging Season

Sunset on June 30 marks the start of a fun family experience—frog season. Frog season spans the gap between hunting and fishing. Children 15 years of age or younger and Missouri residents 65 years of age or older are not required to have a permit. If you have a hunting permit, you can take them legally with a pellet gun, longbow, crossbow, atlatl, hand net, or bare hands. Missouri regulations also allow the use of .22 or smaller caliber rimfire rifles and pistols. However, these are not allowed on some Conservation Areas.

With a fishing permit, you can use a hand net, gig, longbow, or pole and line. Gigs and pellet guns are the most popular methods, but not necessarily the most effective or efficient. Once a



Frogging with the family

frog is speared, it must be harvested. You should not release an injured frog, as the animal is not likely to recover. Aside from hunting raccoons and other furbearers, frogs are the only game that can be taken with artificial lights in Missouri. Anglers will find a headlamp helpful as it keeps both hands free. Missouri's frogging season opens at sunset June 30. The daily limit is eight bullfrogs and green frogs combined. Remember that individual hunters must keep their frogs separate and identifiable from those of other froggers.

Luckily for frog-leg fanciers, bullfrogs and green frogs—the only two species that can be taken legally in Missouri—are both voracious predators. Their mouths are as wide as their heads, and they will eat anything they can jam into their capacious gullets with their front feet. A savvy frog angler can put a limit of eight frogs in a bag in less time than it takes a hunter to paddle once around the pond.

The bullfrog is North America's biggest native frog and Missouri's State Amphibian measuring up to 8 inches from snout to tailbone. A good-sized bullfrog can weigh well over a pound, so a stout pole and line in the 10-pound-test range is recommended. The green frog is nearly identical, yet it has bright green lips and two folds of skin along the sides of the back. Another difference is their call. Bullfrogs bellow a deep "jug-o-rum, jug-o-rum" and green frogs sound like plucking a loose banjo string. Good frog hunters use these calls to not only find the frogs, but to tell which one they are about to catch.

After skinning, frog legs have a mild flavor very much like fish or chicken. They taste great battered and fried or sautéed in butter with a little garlic or herbs. They also make a terrific base for Cajun dishes that call for fish or shellfish.

So get your headlamp and nets ready to have a memorable outdoor experience with your family this summer. You will quickly see why Missouri is a great place to hunt and fish as well as understand why frogging season has such avid fans.

For more information about catching and cooking frogs, visit <mdc.mo.gov/node/7787>. For more information about frog hunting regulations, visit <mdc.mo.gov/node/3666>.

- John Miller, Interpretive Center Manager and Jim Low, News Services Coordinator

Southwest Regional Office 2630 N. Mayfair Avenue, Springfield, MO 65803 • mdc.mo.gov/node/257

Apprentice Hunter Authorization

Although it's summer, many people's thoughts are beginning to focus on fall hunting trips—not only for themselves, but for friends or family members who have never been hunting. If either part of this scenario—the hunter or nonhunter—describes you, maybe it's time to check into the Missouri Department of Conservation's Apprentice Hunter Authorization.

In a nutshell, this is an option to introduce adults to hunting. It's designed for adults (age 16 and older) who haven't had Hunter Education and were born on or after January 1, 1967, which is the mandatory date after which all Missouri hunters need Hunter Education Certification in order to buy a firearms hunting permit. This feature is not a different type of hunting permit. After purchasing your Apprentice Hunter Authorization for \$10, you'll still need to purchase whatever firearms hunting permit you'll need for your type of hunt. The only difference is you won't need Hunter Education Certification to purchase that permit.

The holder of an Apprentice Hunter Authorization will need to be in the presence of a properly licensed adult hunter (age 18 or older) who is Hunter Education certified or was born before January 1, 1967. This adult, who is the mentor, must have either a filled or an unfilled permit for the prescribed season.

The Apprentice Hunter Authorization can be purchased by the holder for no more than two years. After that, the apprentice will be required to take Hunter Education if he or she wants to continue hunting on a firearms permit. (It should be noted that there are special provisions for Missouri resident landowners hunting on their own property.) If you have any questions about the Apprentice Hunter Authorization, check with your local conservation agent, Missouri Department of Conservation office, the *Wildlife Code of Missouri*, or online at <mdc.mo.gov>.

Programs such as these are designed to increase the number of people who get out and see the natural beauty and wildlife diversity that make up this state's outdoor landscape. Once they've seen it, it's hoped they will develop an appreciation for it and want to continue their outdoor pursuits, which, in this case,

is hunting. The next hoped-for step is that these individuals will become better stewards of the outdoors and will become more involved in making sure these resources will be around for the next generation to enjoy. That would give even more residents a chance to

prove what many of us already know—that Missourians care about conserving forests, fish, and wildlife.

- Francis Skalicky, Media Specialist



The Southwest Regional Office is conveniently located just west of the intersection of US-65 and Kearney in Springfield. The public may obtain information on land management, nuisance wildlife, educational opportunities, river and pond management, and more, as well as purchase hunting and fishing permits and obtain area brochures for Conservation Department areas.

HOURS: Monday–Friday: 8 AM–5 PM Closed all state holidays

PHONE: 417-895-6880

Hunting Seasons

Archery Deer and Turkey

September 15-November 14 November 26-January 15, 2015

Firearms Turkey

October 1-31

Firearms Deer

Urban Zones Portion* October 10-13

Early Youth Portion November 1–2

November Portion November 15–25

Antlerless Portion * November 26—December 7

Alternative Methods Portion December 20–30

Late Youth Portion January 3–4, 2015

*view open areas in the 2014 Fall Deer & Turkey Hunting Regulations and Information

Hunter Education Sessions

Classroom Sessions

Location	Date/Time
Springfield Conservation Nature Center	July 12 • Saturday • 8 AM—12 NOON
	August 9 • Saturday • 8 AM—12 NOON
Skills Sessions	
Location	Data/Time

Location	Date/Time
Springfield Conservation Nature Center	July 12 • Saturday • 1—5 PM
	August 9 • Saturday • 1—5 PM
Andy Dalton Shooting Range	August 16 • Saturday • 8 AM—12 NOON
Wildcat Glades Conservation & Audubon Center	August 20 • Wednesday • 6–10 PM
	August 28 • Thursday • 6—10 PM

Bowhunter Education Session

Location	Date/Time
Andy Dalton Shooting Range	. August 9 • Saturday • 8 AM—5 PM

Visit <mdc.mo.gov/node/3722> to register for these sessions and to check for session changes and/or additions.



Roaring River State Park (Cassville, MO)

Kids ages 15 and under will receive a free daily fishing tag. Educational programs and activities are scheduled throughout the day. Call 417-847-2430 for details.



_ Friend





voutube.com/user/moconservation

Missouri Department of Conservation





Conservation pays by enriching our economy and quality of life.

Conservation Showcase:

Native Prairies in Southwest Missouri

LOCATION: There are several Conservation Areas in southwest Missouri that include native prairies on them. Most of these Conservation Areas are in Barton and Dade counties with some in Lawrence and Jasper counties. Some of the most diverse native prairies are Niawathe, Wah-Sha-She, Pawhuska, and Diamond Grove. However, there are over 20 other Conservation Areas in the area that have native prairie of various diversity and quality.

THE PRAIRIE ECOSYSTEM: When most people talk about prairies, they often think of the tall grasses as indicative of prairie; however, a prairie is much more. What makes native prairies so

incredible is their healthy soil and rich diversity of plants, insects, and animals. The soil is rich in organic matter from never being plowed. Many prairie plants and grasses have roots that can be over 15 feet deep. These roots continually feed the soil and provide ideal living conditions for various microbes, insects, earthworms, and plant seedlings. Many prairies in the area have more than 250 plant species. Many of these broadleaf plants or wildflowers only grow on native prairies and, thus, are very rare. Mead's milkweed and royal catchfly are a couple of the most conservative and rare plants that can be found on some public prairies in southwest Missouri.

Just as many plant species need specific soil conditions to grow and survive, many insects can only survive and complete their life cycle utilizing specific plants that grow on native prairies. Thus the diversity of plants on a native prairie supports a very diverse insect population. Prairie mole crickets and regal fritillary butterflies are just a few of the rare insects that rely on native prairie plants. There are several hundred species of insects that live in native prairies. This diverse and rich abundance of plants and insects provide ideal habitat for many grassland bird species. One of the most notable prairie birds is the greater prairie chicken, known for its elaborate breeding display in spring called "booming." Many grassland birds, including the greater prairie chicken, have declined dramatically as native prairies have been converted to other land types. However, prairie chickens can still be observed on some remnant prairies in Barton and Dade counties. Grasshopper sparrows, dickcissels, and upland sandpipers are also bird species that depend on diverse grasslands to survive.

Prairies evolved and thrived through natural disturbances such as fires, droughts, and grazing by bison. Many of the native prairies owned and managed by the Missouri Department of Conservation (MDC) are managed using prescribed fire and controlled grazing in order to increase plant diversity and proper plant structure needed by the many insects, birds, amphibians, and mammals that thrive on diverse grasslands. Without proper disturbance, these prairies would quickly succeed to woody shrubs and eventually to forests.

PRAIRIE MANAGEMENT: Historically, nearly one-third of Missouri was covered by native prairie or approximately 15 million acres. However, due to expansion of cities, row cropping, and grass conversion, fewer than 90,000 acres or less than one percent remain. Many of the Conservation Areas in Missouri were once native prairies; however, prior to acquisition by MDC, portions of these areas were plowed and put into row crops or nonnative grasses. Efforts are being made to reestablish diverse grasslands. There are over 500 acres of "prairie reconstructions" that have been done on Shawnee Trail, Bushwhacker Lake, and Buffalo Wallow Prairie Conservation Areas in Barton County. Seeds from native grasses, wildflowers, and sedges are collected and then planted on the row-cropped areas. A prairie reconstruction often takes over five years or longer to begin showing plant diversity. Some reconstructed prairies have over 70 plant species. It's important to note that once a prairie is sprayed with herbicides or plowed, it is lost forever and so is the incredible diversity of all the plants, insects, and animals. Prairie reconstruction methods will result in a diverse grassland; however, it will never have all the components of a native prairie. So visit several of the native and reconstructed prairies and be sure to bring your binoculars and camera. Late spring and early summer are the best times to observe colorful wildflowers and hear many grassland bird species.

-David Darrow, Wildlife Management Biologist